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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,209	04/23/2001	Jin Lu	US 010191	3948

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EXAMINER

BOCCIO, VINCENT F

ART UNIT	PAPER NUMBER
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2165

MAIL DATE	DELIVERY MODE
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03/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/840,209

Applicant(s)

LU, JIN

Examiner

Vincent F. Boccio

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Brief Filed on 11/27/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2165.

Reopening Prosecution

In view of the appeal brief filed on 11/27/2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



CHRISTIAN CHACE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

The arguments are deemed moot since it appears that the rejections previously made has been misinterpreted. The examiner has set fourth new grounds of rejection in light of applicant's arguments presented.

The examiner's rejections of the claims, now set forth are in light of applicant arguments against the art applied, but, applied in a modified position therefore, the arguments are deemed moot.

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Specification

The specification is objected to because of the following informalities:

Page 15 is the specification lines 1, 8 and 10, recite that the transmission controller is designated as "180", but, in accordance to Fig. 1, the Transmission Controller is designated as 175.

It is noted that "180" is designated as Video Program Source in Fig. 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 102/103

A person shall be entitled to a patent unless -
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Or in the alternative

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-16 are rejected under 35 U.S.C. 102(b) as anticipated by Motorola "Integrated Data-casting Solutions for Digital TV (6/1999) or, in the alternative, under 35 U.S.C. 103(a) as obvious over Motorola in view of Harriman et al. (US 5,898,687).

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Regarding claim 9, Motorola discloses and meets the limitations associated a method for downloading data from data-cast streams transmitted by a television broadcast system (Fig. 6, "Data Assimilation" and Satellite Receiver, Video, Audio and ID data) to a data storage apparatus within a local broadcast facility (page 6, "storage"),

the method comprising the steps of:

- o receiving a first data-cast at the local broadcast facility transmitted by the television broadcast system (page 6, Satellite Receiver Video, Audio and ID data, also see Content storage and Branding);

- o detecting in the first data-cast stream a plurality of data-cast blocks at the local broadcast facility (page 6, "Most content is cached" and "scheduled for broadcast");

- o comparing at the local broadcast facility a first content parameter associated with a first one of the data-cast blocks with at least one subscriber-specific parameter associated with the data storage apparatus (page 4, Data-casting Networks and page 6, data assimilation, "Most Content is cached on a server where is can be branded and scheduled for broadcast" and page 7, conditional access, "portions of the data-casts are tailored to the interests of separate groups with the station service area, and Uni-casting ... targeting to a specific PC user", page 8, "targeting advertising is an obvious example of these features", therefore to target comparing is done to determine what to transmit based on any of Demographics, purchase history, stated preferences) ;

- o in response to a determination the first content parameter matches the at least on subscriber-specific parameter, storing the first block in a storage medium (user's PC hard drive, which also can make determinations to store data-casts and is done with user profile, page 11) associated with the first data storage apparatus (Local Broadcaster storage, which performs targeting or group casting, based on demographics or other profile information users within the local broadcast area, see page 4, and page 11, User Profile and Interactive Viewing),

- o storing the first data-cast block in a storage medium

(Hard Drive of user's PC, see pages 7-8, "files to be downloaded to the user's PC" and "Targeted to a specific PC

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user" or "uni-casting", also pages 3-4), based on transmitting at the local broadcast facility the first data cast in accordance with the first content parameter, see page 8, "By allowing to cache only the relevant and authorized services on its hard drive", therefore reads on determining based on a content parameter at a user's PC, and "Two different people logging into the same data-cast would see their PC bring up different set of advertisements based on the user's individual demographics, purchase history or stated preferences"), therefore, filtering is also deemed to be at the user's PC, in addition to the local broadcast facility, by targeting specific individuals (uni-) and group casting (multi).

After a careful consideration of Motorola alone a prima facie case may be set forth that the examiner renders inherent to provide transmission queues for multi-casting, uni-casting and group casting in view of pages 5-12 that based on page 9 in view of the system is not believed to be operable without. The examiner renders the buffering or queues a required feature to perform the operation of the downstream data inserter to be operable (page 9). The examiner believes that the system would not be operable without buffering or queues for transmission content to be injected or inserted into an MPEG transport stream by opportunistic-ly injected, the data where null packets previously existed in the MPEG stream (page 10).

Upon lack of addressing this argument (inherency) the examiner will deem applicant to be non-responsive to point made and will consider that applicant has accepted the rejection under anticipated, as being a prima facie case against the current claims.

On the alternative the examiner has set forth below an additional rejection under 103 in view of Harriman.

Motorola discloses at page 7, conditional access and targeting a specific PC User or *Uni-Casting*; "service are tailored to the interests of separate groups" or *Multicasting*; and wherein all PC receive the same or casting, wherein the local station has storage (see page 6, "storage"),

but, assuming applicant can rebut the assertion of inherency discussed supra Motorola may be considered to fail to particularly disclose a plurality of data storage apparatuses within the local broadcast facility.

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Motorola provides for casting to groups, individuals and all in the service area, but, may fail to disclose or (anticipate), the corresponding plurality of data storage apparatuses, in view of applicant's Fig. 1, the storage apparatuses correspond to queues (Fig. 1, QUEUE 172, 174, 176 of memory 170, page 14), for facilitating the three different types of casts claimed.

Harriman teaches col. 2, line 66 to col. 3, line 22, "the shared memory fabric decides whether a uni-cast or multicast cell is transferred", col. 3, line 66 to col. 4, line 2, "110 ... shared memory ... composed of random access ... **devices**", also see Figs. 1-2, the utilization of a plurality of memory elements (memory used for different types of data-casting transmissions), thereby to selectively store data to selectively cast to either individuals (uni-casting) or groups (multi-casting, more than one), from the shared memory having a plurality of data storage apparatuses/devices, as taught by Harriman.

The queuing of the data to cast is done to direct the data to specific receivers (uni-cast {one} or multi-cast {more than one} or casting {all} and is deemed to be an encapsulation process, required to direct the to specific users, as preparation for transmission.

Therefore, it would have been obvious to those skilled in the art at the time of the invention to modify Motorola by incorporating a plurality of storage apparatuses, as taught by Harriman, being a plurality of storage apparatuses/devices in order to perform the data casting to groups (multi-cast queue, groups) or individuals (uni-casting) and casting/broadcasting (all) by processing data to target receiving units being user's PCs from the local broadcast facility.

Regarding claims 10-16, the combination with Motorola further meets the limitations of wherein the system comprises a plurality of end user apparatuses (page 7, "multicasting to demographic groups", which also meets the limitation of wherein the group is met by all, and/or at least one subgroup associated with all, met by demographic groups/groups) and further to multicast to a group or subgroup requires an address unique to the demographic and uni-casting or only by one, wherein uni-casting is targeting which requires a unique address associated with one end user, also page 7, as disclosed.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Motorola "Integrated Data-casting Solutions for Digital TV (6/1999) in view of Harriman et al. (US 5,898,687).

Claims 17-20 {system claims} are deemed analyzed and discussed with respect to method claims 9-16 above in view of Harriman.

Regarding claim 17, the combination of Motorola and Harriman render obvious and meet the limitations associated with

- o a TV broadcast system (Fig. 5, "Broadcast to Receiver Platform"), capable of transmitting datacast streams retained on a plurality of storage apparatuses (Motorola {page 6, "storage"} and Harriman, Fig. 1, memory 112 and Queues being Uni-cast 130 and Multicast 200) capable of capturing data in datacast streams, the TV broadcast system comprising:

- o a data retrieval controller (Harriman provides for the recited controller for conducting the casts Uni & Multi-cast), capable of accessing a plurality of data sources (incoming sources Motorola, page 6) and retrieving from each of the plurality of data sources Web page data (see pages 6 {variety of sources} and 11, datacast data being Internet IP data or web page designations by IP, alternatively a URL address to a web page), associated with the each of from each of the plurality of data sources; and

- o a transmission controller capable of causing a first of the plurality queues to be transmitted in a broadcast transmission receive-able by all of the plurality of storage apparatuses (met by a broadcast to all in the service area) and further capable of causing a second of the plurality of queues to be transmitted (see Multi-casting), wherein selected portions

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of web page data (IP or internet IPs), only a selected group (demographic casting for example).

Based on the combination as applied above (with respect to claim 9, above), it is deemed obvious to store upon the determination of datacast data to transmit to selectively store the datacast data in the associated memory of the queues and to transmit from the queues, after the storing and encapsulation of the data cast data in the casting modes of operation, as is obvious to those skilled in the art with the combination of prior art teachings in front of the examiner.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Motorola "Integrated Data-casting Solutions for Digital TV (6/1999) and Harriman et al. (US 5,898,687), as applied above, and further in view of Ullman et al. (US 2004/0236865).

Regarding claim 1, as applied above the combination of Motorola and Harriman, fails to particularly disclose a controller within the local TV broadcast facility capable of receiving a first data-cast stream transmitted by the TV broadcast system (sources) and detecting therein a plurality of data-cast blocks, wherein the controller employs a first content parameter associated with a first one of said data storage apparatus and wherein the controller, in response to a determination stores said first data-cast block in the storage medium at the local broadcast facility or an automatic means to select data-cast data to user's PCs.

The applied combination renders obvious to selectively storing, to memory (Harriman), at the local broadcast facility to encapsulate the stored data to perform the targeting of user's and groups of users corresponding to the casting modes taught.

Ullman et al. teaches to accomplish personalization of service, with a stored user profile ... automatic choices made by an algorithm (such as a FILTER), residing on the service 62, thereby selectively selecting content automatically base on relevant to users interests, demographics, history or behavior in the system (0041-0042 etc...), as taught by Ullman.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to provide for an automatic

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means or an algorithm based on user profiles to decide what to transmit at the source, as taught by Ullman.

Further based on the combination renders obvious to utilize the memory of Harriman to store after determination of what type of castings to accomplish base on profile, to facilitate the targeting using the memory elements of Harriman in one of more of the casting modes, such as the uni-cast or multicast or casting, transmission mode, as Harriman's queues are used to encapsulate and target user's in the area, as is deemed obvious and required to perform this step, as is obvious to those skilled in the art.

Claims 2-8 represent the corresponding apparatus claims and are deemed are analyzed and discussed with respect to the claims 10-16 above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The examiner cites Naimpally et al. which teaches

- o replacing stuffing bytes with private data (abstract);
- o in accord to cols. 1 & 4, in an MPEG 2 transport

stream, there exists, "stuffing", which is deemed conventional in an MPEG 2 transport stream, wherein stuffing is used wherein there is insufficient PES packet data to fill the transport stream packet payload bytes to support the established data rate (col. 4).

As stated by Naimpally, col. 4, "The present invention ... take advantage of the otherwise wasted resources dedicated to "stuffing" in order to insert private data.

Motorola {as applied to claims supra}, with respect to page 10, must utilize some sort of an encoder to perform this

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inserting or swapping operation, UTILIZING MEMORY and controller (910, 916, 918 etc.....), TO ACCOMPLISH THIS OPERATION (see Fig. 9, Naimpally).

It is deemed that Motorola also requires selective buffering of data to insert datacast packets, stated as swapping NULL packets of an MPEG 2 transport stream, in Motorola (see pages 9-10), and therefore another set of buffering or storage appears necessary and required, based on Naimpally teachings.

Contact Information

Any inquiry concerning this communication or earlier communications should be directed to the examiner of record Vincent F. Boccio whose telephone number is (571) 272-7373.

The examiner can normally be reached on between Monday thru Friday between (7:30 am to 5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

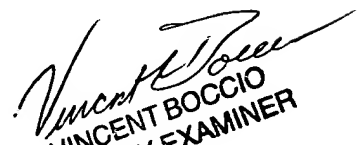
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Primary Examiner, Boccio, Vincent
2/28/08


VINCENT BOCCIO
PRIMARY EXAMINER